AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

- 1. (Currently Amended) A method of producing a bone substitute material in the form of a block predominantly composed of carbonate apatite for medical use, which comprises the step of forming carbonate apatite by contacting a block of calcium compound with a phosphate-containing solution, wherein said calcium compound block contains substantially no powders, wherein at least one of said calcium compound block and said phosphate solution contains a carbonate group, and wherein the method does not include any sintering step.
- 2. (Original) The method of producing a bone substitute material for medical use as claimed by claim 1, wherein the block of calcium compound is one prepared using an artificially synthesized calcium compound.
- 3. (Original) The method of producing a bone substitute material for medical use as claimed by claim 2, wherein the calcium compound block prepared using an artificially synthesized calcium compound is a foamed calcium compound.
- 4. (Currently Amended) A bone substitute material produced by the <u>a</u> method as claimed in claim 1 comprising forming carbonate apatite by contacting a block of calcium compound with a phosphate-containing solution, wherein said calcium compound block contains substantially no powders, wherein at least one of said calcium compound block and said phosphate solution contains a carbonate group, and wherein the method does not include any sintering step, and wherein the bone substitute material is predominantly composed of carbonate apatite with carbonate group content of 0.5% or more by weight.
- 5. (Currently Amended) A bone substitute material produced by the method as

claimed in claim [[2]] 4, wherein the block of calcium compound is one prepared using an artificially synthesized calcium compound material is predominantly composed of carbonate apatite with carbonate group content of 0.5% or more by weight.

- 6. (Currently Amended) A bone substitute material produced by the method as claimed in claim [[3]] 4, wherein the calcium compound block prepared using an artificially synthesized calcium compound is a foamed calcium compound material is predominantly composed of carbonate apatite with carbonate group content of 0.5% or more by weight.
- 7. (New) The method of producing a bone substitute material for medical use as claimed in claim 1, wherein the contacting of the block of calcium compound with the phosphate-containing solution comprises immersing the block in the phosphate-containing solution.
- 8. (New) The method of producing a bone substitute material for medical use as claimed in claim 3, wherein the porous block has an average pore diameter in a range of 50-1000µm.
- 9. (New) A method of producing a bone substitute material predominantly composed of carbonate apatite, comprising:

providing a porous body formed of a calcium compound, the body containing substantially no powders and having an average pore diameter in a range of 50-1000µm;

contacting the porous body with a phosphate-containing solution, at least one of said porous body and said phosphate solution containing a carbonate group, whereby the porous body is predominantly composed of carbonate apatite; and wherein the method does not include any sintering step.